

TRI-PLUS[®]
ACETABULAR SYSTEM



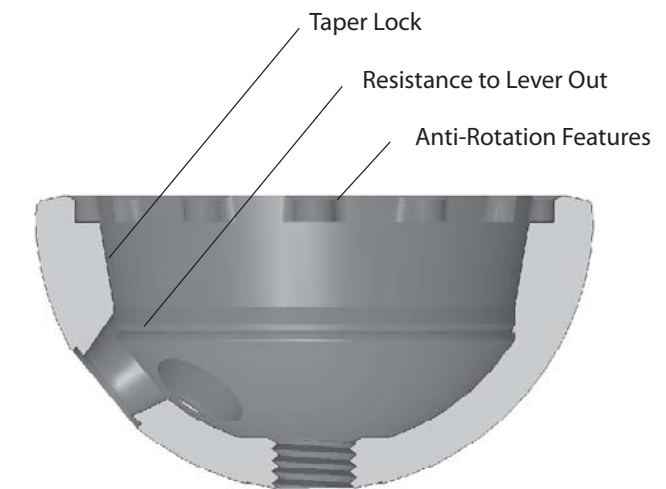
INTRODUCTION TO TRI-PLUS® ACETABULAR SYSTEM

The Tri-plus® Acetabular shell is a true hemispherical design featuring plasma spray coating which allows the substrate to retain its fatigue strength characteristics. The shell and liner utilize a secure locking mechanism designed to decrease the potential for polyethylene wear debris. The liner is manufactured from direct-compression-molded polyethylene and incorporates anti-rotation features.

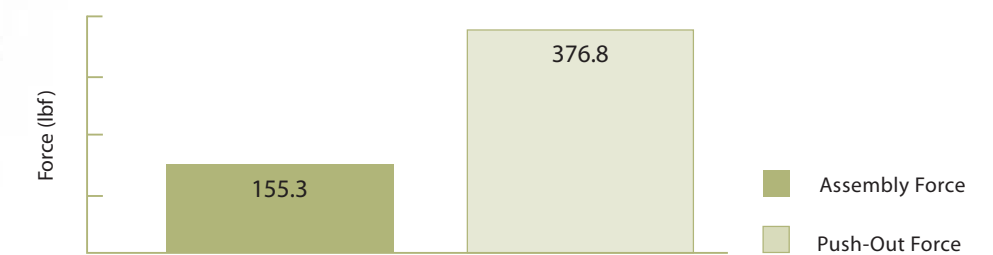


LOCKING MECHANISM

The locking mechanism, with superior surface tabs, allows for secure fixation with a 95% congruency between the shell and liner. Once the shell is locked into place the push-out force is over 375 lbs., the lever-out force is 410 in-lbs., and the rotational torque is 210 in-lbs. To allow for proper liner indexing, the shell is also designed with recessed anti-rotation features and the liner with superior surface tabs.



AVERAGE ASSEMBLY AND PUSH-OUT FORCE



Tri-Plus™ Acetabular Shell Assembled with Polyethylene Liner

TRUE HEMISPHERE DESIGN

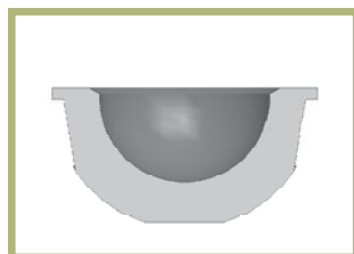
The Tri-plus shell design is a true hemisphere allowing for a proper press-fit without the worry of fracturing the acetabulum while impacting the shell.

SHELL OPTIONS

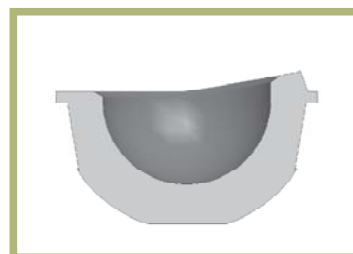
The shell is available in several options, including: No-hole, Cluster hole, and Multi-hole options to provide maximum acetabular fixation.

LINER OPTIONS

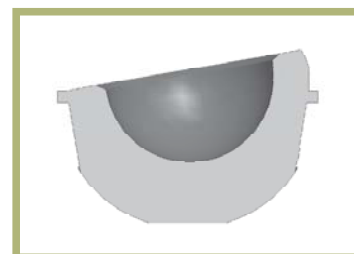
The Tri-plus liners are manufactured from Highly Crosslinked Polyethylene to help decrease wear debris. The liners are available in several options including: Neutral, Hooded (10°) and Lateral Face-changing. To maximize range of motion each liner has sizes to accommodate 22, 28, 32 and 36mm femoral head options.



Neutral



Hooded

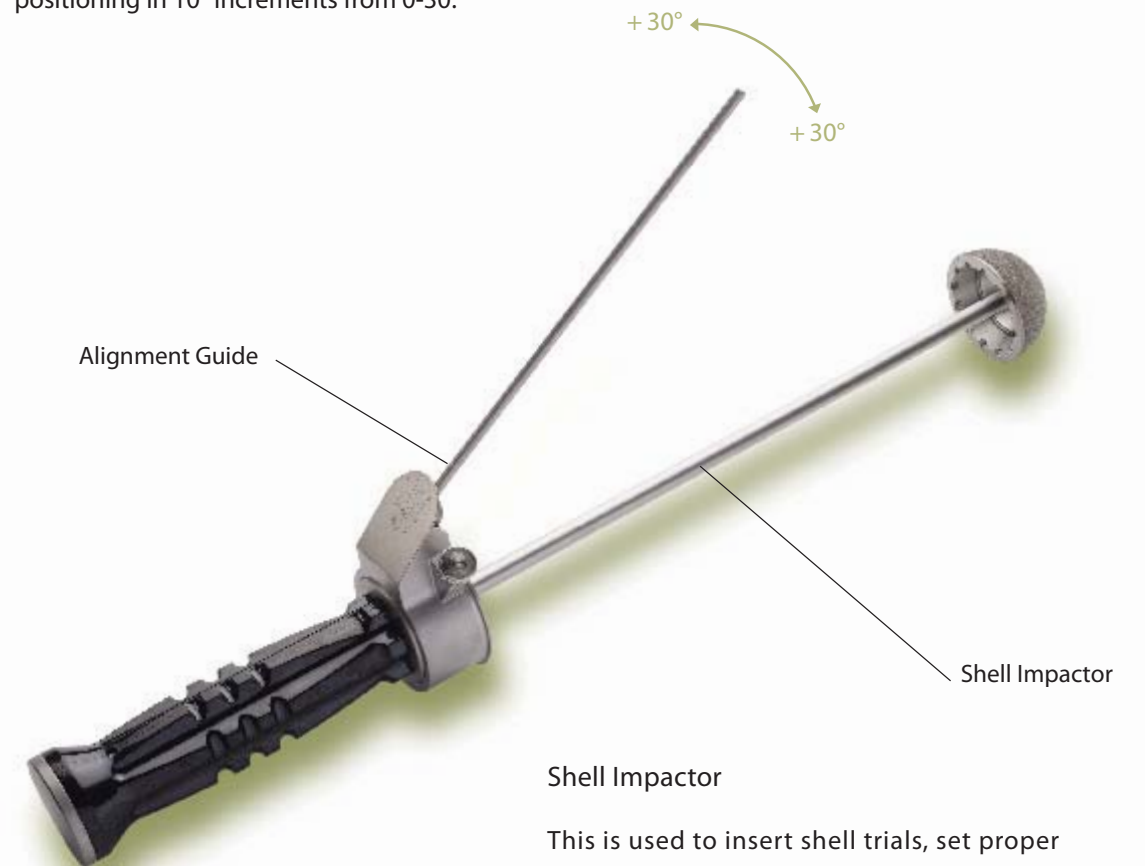


Lateral Face-Changing

INSTRUMENTS

Alignment Guide

Features an easy-to-use alignment rod that provides reproducible results. It allows for 60° of anteversion positioning in 10° increments from 0-30°.



Shell Impactor

This is used to insert shell trials, set proper positioning and impact the appropriately selected Tri-Plus Shell. With a threaded connection it also can be used as a reverse impact surface.

PRODUCT SPECIFICATIONS

SIZE	LINER	HEAD DIAMETER
40mm	22 x 40mm	22mm
42mm	22 x 40mm	22mm
44mm	22 x 44mm	22mm
46mm	22 x 44mm	22mm
48mm	28 x 48mm	28mm
50mm	28 x 48mm	28mm
52mm	32 x 52mm	32mm
54mm	32 x 52mm	32mm
56mm	32 x 52mm	32mm
58mm	36 x 58mm	36mm
60mm	36 x 58mm	36mm
62mm	36 x 58mm	36mm
64mm	36 x 64mm	36mm
66mm	36 x 64mm	36mm
68mm	36 x 64mm	36mm
70mm	36 x 64mm	36mm

SIZE	LENGTH	SIZE	LENGTH
6.5 x 15mm	15mm	6.5 x 60mm	60mm
6.5 x 20mm	20mm	6.5 x 65mm	65mm
6.5 x 25mm	25mm	6.5 x 70mm	70mm
6.5 x 30mm	30mm		
6.5 x 35mm	35mm		
6.5 x 40mm	40mm		
6.5 x 45mm	45mm		
6.5 x 50mm	50mm		
6.5 x 55mm	55mm		

ORDER INFORMATION

PRODUCT NO.	DESCRIPTION	PRODUCT NO.	DESCRIPTION
128-0040	Tri-plus Shell Cluster 40mm	128-0156	Tri-plus Shell No-hole 56mm
128-0042	Tri-plus Shell Cluster 42mm	128-0158	Tri-plus Shell No-hole 58mm
128-0044	Tri-plus Shell Cluster 44mm	128-0160	Tri-plus Shell No-hole 60mm
128-0046	Tri-plus Shell Cluster 46mm	128-0162	Tri-plus Shell No-hole 62mm
128-0048	Tri-plus Shell Cluster 48mm	128-0164	Tri-plus Shell No-hole 64mm
128-0050	Tri-plus Shell Cluster 50mm	128-0166	Tri-plus Shell No-hole 66mm
128-0052	Tri-plus Shell Cluster 52mm	128-0168	Tri-plus Shell No-hole 68mm
128-0054	Tri-plus Shell Cluster 54mm	128-0170	Tri-plus Shell No-hole 70mm
128-0056	Tri-plus Shell Cluster 56mm	Acetabular Shell – Multi-hole	
128-0058	Tri-plus Shell Cluster 58mm	128-0240	Tri-plus Shell Multi-hole 40mm
128-0060	Tri-plus Shell Cluster 60mm	128-0242	Tri-plus Shell Multi-hole 42mm
128-0062	Tri-plus Shell Cluster 62mm	128-0244	Tri-plus Shell Multi-hole 44mm
128-0064	Tri-plus Shell Cluster 64mm	128-0246	Tri-plus Shell Multi-hole 46mm
128-0066	Tri-plus Shell Cluster 66mm	128-0248	Tri-plus Shell Multi-hole 48mm
128-0068	Tri-plus Shell Cluster 68mm	128-0250	Tri-plus Shell Multi-hole 50mm
128-0070	Tri-plus Shell Cluster 70mm	128-0252	Tri-plus Shell Multi-hole 52mm
Acetabular Shell – No-hole		128-0254	Tri-plus Shell Multi-hole 54mm
128-0140	Tri-plus Shell No-hole 40mm	128-0256	Tri-plus Shell Multi-hole 56mm
128-0142	Tri-plus Shell No-hole 42mm	128-0258	Tri-plus Shell Multi-hole 58mm
128-0144	Tri-plus Shell No-hole 44mm	128-0260	Tri-plus Shell Multi-hole 60mm
128-0146	Tri-plus Shell No-hole 46mm	128-0262	Tri-plus Shell Multi-hole 62mm
128-0148	Tri-plus Shell No-hole 48mm	128-0264	Tri-plus Shell Multi-hole 64mm
128-0150	Tri-plus Shell No-hole 50mm	128-0266	Tri-plus Shell Multi-hole 66mm
128-0152	Tri-plus Shell No-hole 52mm	128-0268	Tri-plus Shell Multi-hole 68mm
128-0154	Tri-plus Shell No-hole 54mm	128-0270	Tri-plus Shell Multi-hole 70mm

ORDER INFORMATION

PRODUCT NO.	DESCRIPTION	PRODUCT NO.	DESCRIPTION
Acetabular Liner – Neutral		142-3264	Tri-plus Liner Lateral Face-changing 32x64mm
140-2240	Tri-plus Liner Neutral 22x40mm	142-3658	Tri-plus Liner Lateral Face-changing 36x58mm
140-2244	Tri-plus Liner Neutral 22x44mm	142-3664	Tri-plus Liner Lateral Face-changing 36x64mm
140-2848	Tri-plus Liner Neutral 28x48mm	Cancellous Bone Screw	
140-3252	Tri-plus Liner Neutral 32x52mm	146-1015	Cancellous Bone Screw 6.5mm x 15mm
140-3258	Tri-plus Liner Neutral 32x58mm	146-1020	Cancellous Bone Screw 6.5mm x 20mm
140-3264	Tri-plus Liner Neutral 32x64mm	146-1025	Cancellous Bone Screw 6.5mm x 25mm
140-3658	Tri-plus Liner Neutral 36x58mm	146-1030	Cancellous Bone Screw 6.5mm x 30mm
140-3664	Tri-plus Liner Neutral 36x64mm	146-1035	Cancellous Bone Screw 6.5mm x 35mm
Acetabular Liner - 10° Hooded		146-1040	Cancellous Bone Screw 6.5mm x 40mm
141-2240	Tri-plus Liner Hooded 22x40mm	146-1045	Cancellous Bone Screw 6.5mm x 45mm
141-2244	Tri-plus Liner Hooded 22x44mm	146-1050	Cancellous Bone Screw 6.5mm x 50mm
141-2848	Tri-plus Liner Hooded 28x48mm	146-1055	Cancellous Bone Screw 6.5mm x 55mm
141-3252	Tri-plus Liner Hooded 32x52mm	146-1060	Cancellous Bone Screw 6.5mm x 60mm
141-3258	Tri-plus Liner Hooded 32x58mm	146-1065	Cancellous Bone Screw 6.5mm x 65mm
141-3264	Tri-plus Liner Hooded 32x64mm	146-1070	Cancellous Bone Screw 6.5mm x 70mm
141-3658	Tri-plus Liner Hooded 36x58mm	Miscellaneous	
141-3664	Tri-plus Liner Hooded 36x64mm	128-0001	Apical Hole Plug (packaged with each shell)
Acetabular Liner - 10° Lateral Face-changing*		128-0002	Screw hole plugs (package of 3)
142-2240	Tri-plus Liner Lateral Face-changing 22x40mm		
142-2244	Tri-plus Liner Lateral Face-changing 22x44mm		
142-2848	Tri-plus Liner Lateral Face-changing 28x48mm		
142-3252	Tri-plus Liner Lateral Face-changing 32x52mm		
142-3258	Tri-plus Liner Lateral Face-changing 32x58mm		

* Available upon request



12187 South Business Park Drive
Draper, Utah 84020

Telephone: 801.553.9991
Fax: 801.553.9993

For more information visit
www.orthodevelopment.com